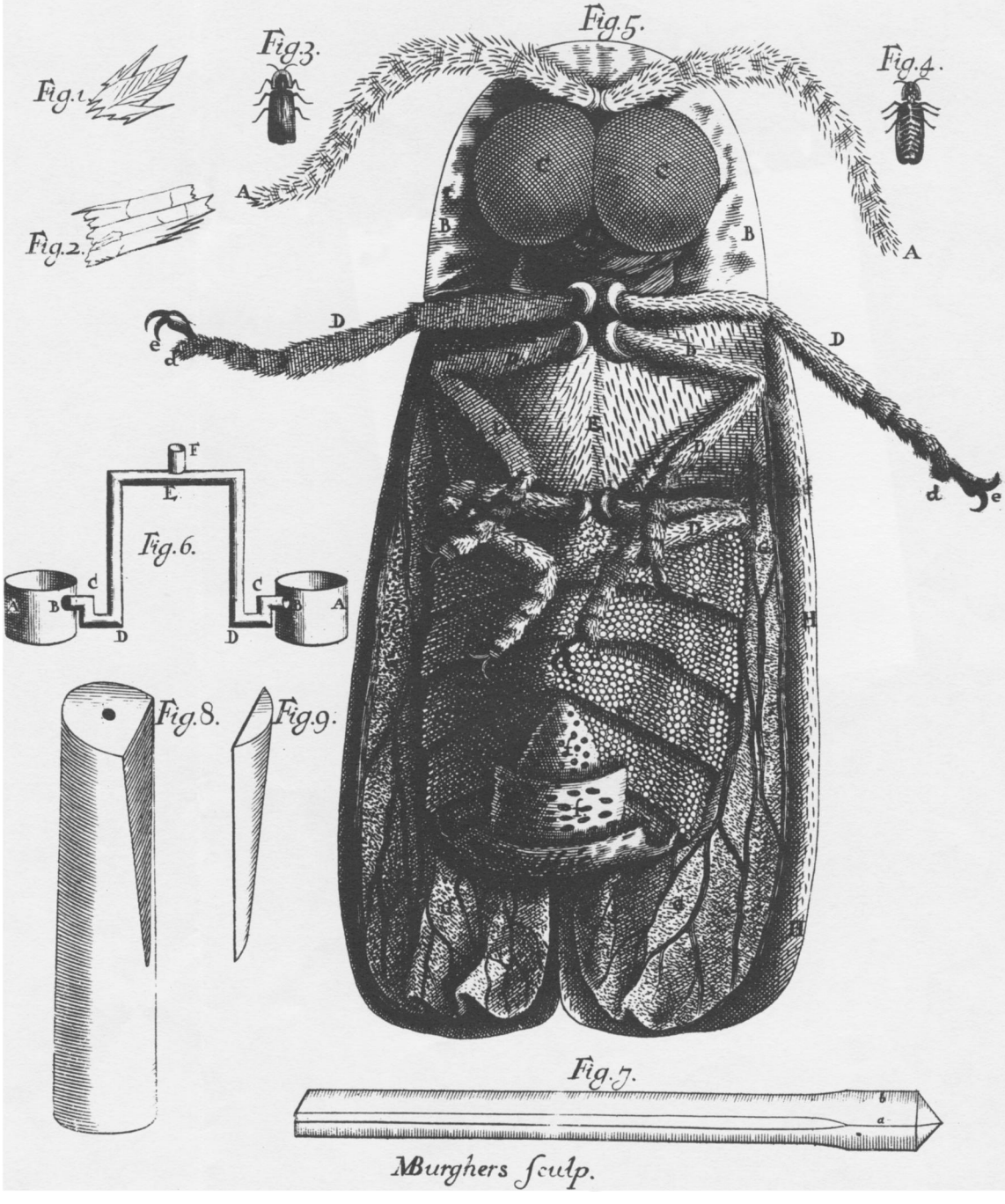
Philosoph. Transact. Number, 167.



Burghers sculp.

A Letter from Mr. J: Beaumont *of* Stony-Eaſton *in* Sommerſetſhire *to one of the S. of the R. S. concerning a New way of* Cleaving *Rocks.*

A worthy Gentleman, who for many years has been a Conſiderable adventurer in the Lead Mines on *Mendip* hills, being in London a while ſince, was pleaſ'd to acquaint me that the Miners there, within theſe twelve months, had gotten a new way of *Cleaving* Rocks with Gunpowder, whereupon I deſir'd he would pleaſe to favour me with a Preſent of the Inſtruments us'd in it, which I conceiv'd would not be unacceptable in the Repoſitory at Greſham Colledge, where I have now caus'd them to be deliuered.

The firſt Inſtrument, which by the miners is call'd the *Borier* deſcribd *Fig.* 7 is made of Iron, and is 2 foot 2 Inches in length, it is an Inch ſquare at the ſteeled end from *a* to *b*, and ſomewhat leſſe in the other part: the uſe of this Inſtrument is to make a hole in the Rock deep enough to receive the Powder: the ſecond Inſtrument, call'd the *Gun* repreſented *Fig.* 8. is 6. Inches in length, $1\frac{1}{4}$ diameter, and has a hole drill'd through it to receive the priming Powder. The firſt Inſtrument is manag'd thus, one man holds it on the Rock and turns it round, while another beats it down with a hammer of five or ſix pounds weight; when the hole is made ſomewhat deeper then the length of the *Gun*, they dry it with a rag, and put into it about 2 or 3 Ounces of Powder, over which they put a thin paper, and on it place the *Gun*, which they bind firmly into the hole, by driving in againſt the flat ſide of the upper part of it, the third Inſtrument, which is a little Iron wedge 4 inches in length, by the Miners call'd a *Quinnet* deſcribd *Fig.* 9. when this is done, they paſs down a wire through the hole drill'd in the *Gun*, and pierce the Paper

Paper which covers the Powder and then they prime the *Gun* and lay a traine and goe up out of the work before the Powder comes to take fire; the Paper is put at firſt oe ver the Powder, leſt when the *Gun* and *Quinet* are drive-down, the tooles may ſtrike fire and kindle the Powder.n

In number: 5. of the Philoſoph. Tranſact. ſet forth by Mr. *Oldenburg* there is a way of breaking Rocks with Gunpowder Communicated by Sr. *Robert Moray*, as he received it from Monſr. du *Son* the Inventor, and there is a draught of the Inſtruments for that purpoſe, but in regard thoſe Inſtruments differ in ſeverall things from theſe, I thought it might not be amiſs if theſe were likewiſe Inſerted,

I know the uſe of theſe Inſtruments will be of great advantage to Miners, and if there are any Minerall works where they are not yet receiv'd, the Miners may doe well to try them; for (beſide what will be ſav'd in timber in a year that is uſd in burning Rocks, which is very conſiderable,) we know that as ſoon as a man has fired his Powder and broken the Rock, he may preſently go to work again, whereas after a fire is laid in a *Shaft*, a man can ſcarce go to work in 24 hours after, the Rocks being too hot to ſuffer him.